



PATENT
MEDCOUNT-103

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : Maurus Logan
Serial No. : 10/635,671
Filed : August 6, 2003
For : METHOD FOR SECURING CABLE TIES AND THE LIKE
Examiner : Jack W. Lavinder
Art Unit : 3677

Commissioner for Patents
P. O. Box 1450
Alexandria, VA 23313-1450


Sir:

LETTER FILING BRIEF ON APPEAL

Filed herewith is applicant's Appeal Brief. His Notice of Appeal is also being filed on this date.

The fee for filing this Brief is \$250.00 since applicant has claimed small-entity status. A check in this amount is filed herewith.

Respectfully submitted,


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APPEAL BRIEF

This appeal brief is filed jointly with a Notice of Appeal and a Petition to Make Special. The submission is in response to the Office Action mailed on March 3, 2005.

(1) REAL PARTY IN INTEREST

The real party in interest is Medcount Systems, L.L.C., by virtue of an Assignment recorded on August 6, 2003 at Reel/Frame 014381/0912.

(2) RELATED APPEALS AND INTERFERENCES

There are no related appeals and interferences.

-1-

(3) STATUS OF CLAIMS

Claims 1-8 are pending in the application and all pending claims stand as finally rejected and are appealed.

(4) STATUS OF AMENDMENTS

No amendments have been filed in response to the extant Office Action.

(5) SUMMARY OF THE INVENTION

The present invention relates generally to cable ties and particularly to cable ties having adaptivity to applications presently served by hook and loop fasteners, e.g., the bundling of optical conductors.

Referring to Fig. 1, conventional cable tie 10 includes a head portion 12 and a tail portion 14 contiguous with head portion 12 and extending to tail portion free end 16. Serrations (not shown) may be formed on either or both of top and bottom sides 18 and 20 of tail portion 14. Head portion 12 includes pawl 22 extending into through passage 24. As is known, pawl 22 may be a plastic member integrally formed with cable tie 10 or may be a metal member.

Turning to Fig. 2, cable encircling member 26 is preferably a thin, flexible, rectangular strip of plastic material, having upper surface 28 and lower surface 30. Opening 32 extends between upper surface 28 and lower surface 30 and is of configuration

facilitating passage of tail portion free end 16 through cable encircling member 26.

Referring to Fig. 3, it shows an initial assembly of the components of Figs. 1 and 2, wherein tail portion free end 16 has been passed through opening 32 and tail portion 14 is dressed along the lower surface 30 of cable encircling member 26, the components being configured such that tail portion free end 16 is disposed outwardly of end 26a of cable encircling member 26.

Conductors (not shown) to be ensnared are now laid upon upper surface 28 of cable encircling member 26. Turning to Fig. 4, free end 16 of cable tie tail portion 14 is now inserted into head portion 12 of cable tie 10 forming cable encircling member 26 into a spiral coil loosely encircling the conductors. The free end 16 of cable tie 10 is now pulled beyond cable tie head portion 12, to the left in Fig. 4 until the spiral coil moves into tightly encircling relation with the conductors.

Aperture 34 is formed in cable encircling member 26 and a screw or bolt (not shown) may be passed through the aperture to secure the Fig. 4 assembly to a mounting plate.

(6) ISSUES

The issues on appeal are:

(a) Is independent claim 1 unpatentable as being anticipated under 35 USC 102 by Farrell Patent No.5,354,021?

(b) Is independent claim 6 unpatentable under Section 103 over Fennell Patent No. 4,700,432 in view of the Farrell patent?

(7) GROUPING OF CLAIMS

While claims 1 and 6 relate to common subject matter, the disparity of the rejections necessitates that the claims be considered in two groups, namely, Group 1 includes claims 1-5 and Group 2 includes claims 6-8. The claims of each group stand or fall together.

(8) ARGUMENT

(a) The rejection of claim 1 is improper in that the farrell patent does not disclose or suggest the invention of claim 1 under applicable case law.

Reliance is placed, e.g., on In re Donohue, 226 USPQ 619 (Fed. Cir. 1985) for the axiom of patent law that anticipation under 35 USC 102 compels reliance on a single prior art reference for disclosure or suggestion of each element of the claim.

(I) CLAIM 1

Claim 1 reads as follows, with emphasis identifying content thereof not disclosed or suggested by the Farrell Patent.

1. Apparatus for bundling conductors, comprising:

(a) a cable tie having a head and a strap extending from the head to a strap free end; and

(b) a cable encircling member having a width exceeding a width of said cable tie strap and flat throughout a full length thereof,

said cable tie being assembled with said cable encircling member and forming said cable encircling member from such flat condition into a spiral coil interiorly of said cable tie and encircling said conductors. (emphasis added)

Simply put, applicant's cable encircling member is flat throughout a full length thereof and a cable tie is assembled with the cable encircling member and forms the flat cable encircling member from such flat condition into a spiral encircling the conductors.

(II) THE REJECTION OF CLAIM 1

The Examiner advises as follows as respects the final rejection of claim 1.

...Farrell discloses an apparatus for bundling conductors comprising a cable tie (36) and a cable-encircling member (18) having a width exceeding a width of the cable tie strap. Farrell also discloses that the cable-encircling member is flat throughout a full length, i.e., the encircling member is made from a shape memory plastic material that is flat when completely stretched out and becomes a spiral coil when released from the flat condition. (emphasis added)

The Examiner does not point to any text of the Farrell patent which, in any way, supports the above-underscored contention of the Examiner. The above bold face terms are not to be found in text of the patent nor supported by the drawings.

Claim 1, having such express content not disclosed or suggested by the Farrell patent cannot be anticipated thereby within the meaning of Section 102.

Since the Farrell patent fails in such disclosure or suggestion, it would appear that the Examiner looks beyond the Farrell patent to find the cable-encircling member to be **flat throughout a full length when completely stretched** out to **become** a spiral coil when released from the flat condition.

Indeed, undersigned's study of the Farrell patent leads to the inescapable conclusion that the Farrell patent fully belies the Examiner's contention, i.e., the patent teaches oppositely from the Examiner's contention, as is now developed.

(III) FARRELL ADVISES THAT THE NATURAL STATE OF HIS CABLE-ENCIRCLING MEMBER IS A SPIRAL FORM.

Farrell calls for his cable encircling member to be comprised of a loop portion 18.

The loop portion 18 of mounting bracket 12 is formed integral with base portion 16 and mounting bracket 12 is made of a single sheet of plastic or other suitable material that will retain its shape, as shown. The mounting bracket 12 is formed by any process suitable for the material chosen. For plastic, the mounting bracket can be, for example, injection molded or heated and shaped in a mandrel, or stamped and subsequently cold worked. (emphasis added) (Farrell Patent, Col. 3, ls. 60-68)

Fig. 5 shows the mounting bracket 12 secured to a structural member 50 by means of screw 22. The clamp mechanism 14 is shown as being cut away from the mounting bracket 12 by means of a cutting device 52. Removal of clamp mechanism 14 provides access to the wiring harness 40 held by loop portion 18. Upon removal of clamp mechanism 14, application of force to the free end 28 of loop portion 18, as indicated by arrow 56, moves the free end 28 away from the inner surface 24 of loop portion 18

and creates a gap therebetween for insertion and removal of wires 58, as indicated by arrows 60. Upon the removal or addition of wires, free end 28 is released, and its natural resiliency brings it back into engagement with inner surface 24, thereby closing loop portion 18... (emphasis added) (Farrell Patent, Col. 5, ls. 5-15)

The Examiner's contention that the "encircling member is made from a shape memory plastic material that is flat when completely stretched out and becomes a spiral coil when released from the flat condition" flies in the face of Farrell's clear disclosure of the fabrication of his encircling member as plastic material that has a shape memory of a spiral coil.

Indeed, stretching Farrell's encircling member to flat condition is anathema to Farrell.

...In addition, when loop portion 18 is opened, as shown in Fig. 5, the wiring harness does not tend to fall out of the loop. The opening in loop 18 is created above the wires. (emphasis added) (Farrell Patent, Col. 5, ls. 26-29)

Stretching of Farrell's encircling member to a flat condition is not in the least mentioned in the patent. To so act upon the encircling member would, as above stated, prevent Farrell's encircling member from attaining its intended purpose.

(IV) OTHER DISTINCTIONS

Still other distinctions exist between the Farrell preformed cable encircling member and that of applicant's claimed structure of claim 1, stemming from the claimed characteristic of applicant's

cable encircling member being flat throughout a full length thereof and a cable tie being assembled with said cable encircling member and forming said cable encircling member from such flat condition into a spiral coil.

Thus, Farrell advises as follows.

Accordingly, it can be seen that a wiring harness clamp is now provided...that supports the wires when the clamp is in an open position. (Farrell Patent, Col. 5, ls. 57-61)

Should one consider applicant's combination of his cable encircling member and cable tie to be a "clamp", it nonetheless is not a clamp which when in an open position supports the conductors.

Still further, Farrell advises as follows.

Preferably, the mounting bracket 12 is made of a material having sufficient flexibility and resiliency to allow the size of the loop portion 18 to be adjustable within a range of sizes...This degree of contraction of loop portion 18 corresponds to approximately a 20% to 30% reduction in the diameter of loop portion 18... (Farrell Patent, Col. 4, ls. 58-68)

To the contrary, since applicant's cable encircling member is fully flat in its unencircled state, there is a quite high range of sizes to which it can be spirally compressed or contracted.

As a final point on the untenability of the anticipation contention, the Examiner indeed fully undermines the same in the Examiner's correct interpretation of the Farrell patent in the Section 103 rejection, discussed hereinafter in detail.

In the outreach to Farrell as a secondary reference in the Section 103 rejection of claim 6, the Examiner advises as follows.

Farrell discloses the method step of providing the encircling member in a spiral coil state and wrapping the cable tie about the outer surface of the spiral wound coil to secure the cable clamp to the conductors. (emphasis added)

AUTHORITY OF INTEREST

Undersigned counsel for applicant served as a non-appearing attorney forming the appeal strategy in Thomas & Betts Corporation v. Litton Systems, Inc., 720 Fed. 2d 1572 (Fed. Cir. 1983). Request is made herein that the Board of Appeals consider this authority in detail. Undersigned submits that case is quite pertinent to the case on appeal.

The subject matter involved was an electrical connector for flat, multiconductor cable (so-called "ribbon cable"). The connector had contacts, each including one end portion of insulation displacing character (IDC), another end portion comprising a pin for insertion in a socket contact of another connector, and a bendable central portion extending between the end contact.

Ribbon cable had an interconductor spacing (pitch) of .050 inch. The connectors (male and female) had pin spacing of .0545 inch. The bendable central contact portion permitted a manufacturing jig to mutually offset the contact end portions to respectively mate with the two different pitches.

The District Court found the claims of the patent in issue to be not infringed since, to give the claims sufficient breadth to be infringed under the Doctrine of Equivalents, the claims would read on prior art showing contacts having bent central portions to effect pitch change as between cable and connector.

The Federal Circuit reversed, advising in parts pertinent to applicant's subject appeal, as follows.

...The references considered by the trial court under 35 U.S.C. 102...disclose a family of contacts exhibiting a progressive degree of offset from center in a symmetrical fashion, but accomplish this result via contacts having a fixed, previously bent central portion...The element that is missing from these references, as the trial court found, is the presence of contacts having "bendable," rather than "bent," central portions. For this teaching, the trial court relied on the Judd patent. (720 F. 2d at 1581)

The Federal Circuit proceeded to find error in the trial court's interpretation of the Judd patent teaching contacts having a bendable central portion for effecting pitch change and closed with its reversal, finding as follows.

...None of the references of record teaches contacts having bendable central portions, and there is no evidence that contacts having bendable central portions would have been within the level of ordinary skill in the art at the time the invention was made. (720 Fed. 2d at 1582)

Undersigned submits that the capacity for changing shape (being shapable) rather than having fixed, previously shaped character where the prior art only encompasses teaching the latter is a quite meaningful distinction for patentability. My analogy

is, of course, to applicant's device being formable from a flat shape into a spiral shape vs. Farrell's device being previously shaped.

(b) The rejection of claim 6 as unpatentable under Section 103 over Fennell Patent No. 4,700,432 in view of the Farrell patent is improper.

(I) CLAIM 6

Independent claim 6 reads as follows.

6. A method for bundling conductors,
comprising the steps of:

(a) providing a cable tie having a head and a strap extending from the head to a strap free end;

(b) providing a cable encircling member having a width exceeding a width of said cable tie strap and in flattened state throughout a full length thereof;

(c) assembling said cable tie and said cable encircling member such that said cable tie strap overlies a first outer surface of said cable encircling member; and

(d) forming said cable encircling member from such flattened state into a spiral coil interiorly of said cable tie and encircling said conductors. (Emphasis added)

As noted above, claim 6 is correlative with claim 1, simply put, covering the method wherein applicant's cable encircling member is flat throughout a full length thereof and a cable tie is assembled with the cable encircling member and forms the flat cable encircling member from such flat condition into a spiral encircling the conductors.

(II) THE FENNELL PATENT

The Fennell patent, while cited in the initial Office Action herein, was not applied in the claim rejections therein. Thus, the following are comments on behalf of applicant are new in the record.

Fennell advises as follows.

...Referring to FIG. 3, the present invention is depicted securely semipermanently attached to an elongate member 21. The flexible strap member 1 is semipermanently attached to elongate member 21 by tie 15 which is first partially inserted through slot 113. The ratchet teeth of the tie 15 are engaged after the tie is partially wrapped around a portion of the elongate member. Once the teeth are engaged, the tie is closed around the elongate member, securing the flexible strap member to the elongate member... (Fennell patent, Col. 2, ls. 58-67)

Fennell applies his cable tie 15 to but single conductor 21 in order to secure his flexible strap member 1 to that single conductor.

Once cable tie 15 is applied to single conductor 21 and secured thereto by cutting the tie strap exiting the cable tie head, as is shown in FIG. 3, flexible strap member 1 is wrapped around a conductor bundle and its releasable VELCRO (registered trademark) locking members (hooks 3 and loops 5) are secured to one another (FIG. 4).

(III) THE REJECTION OF CLAIM 6

The Examiner advises as follows as respects the final rejection of claim 6.

...Fennell discloses the method of providing a cable tie (15), a cable-encircling member having a width exceeding a width of the cable tie strap and in a flattened state throughout a full length (7, 9, 11 figure 2) and then forming the encircling member from a flattened state into a spiral coil. Fennell discloses, in combination, a hook and loop fastener with a cable tie strap for connecting the clamp (?) to the conductors. Fennell fails to disclose wrapping the cable tie about the outer surface of the coiled encircling member. (Applicant's emphasis)

The noted deficiency is clear as set forth in the above-quoted text of the Fennell patent. Fennell applies his cable tie to but a single conductor.

The Examiner continues as follows.

Farrell discloses the method step of providing the encircling member in a spiral coil state and wrapping the cable tie about the outer surface of the spiral wound coil to secure the cable clamp to the conductors. (emphasis added)

Claim 6 requires:

(d) forming said cable encircling member from such flattened state into a spiral coil interiorly of said cable tie and encircling said conductors.

The Examiner concludes in the Section 103 reasoning as follows.

...It would have been obvious to one of ordinary skill in the art to substitute Fennell's hook and loop fastener and cable tie strap with a single cable tie surrounding the outer circumference of the encircling member, as taught by Farrell, to provide a simpler means of fastening the clamp to the conductors and reducing the manufacturing costs associated with the elimination of the hook and loop fastening element.

The Federal Circuit has advised that, for an invention to be considered obvious, there need not be an explicit "suggestion" in the prior art. It is only necessary that the inventor applied

"knowledge clearly present in the prior art". In re Sernaker, 217 USPQ 1, 6 (1983). In reversing the Board, the Court expressly noted that none of the prior art disclosed what the applicant had done in his invention.

The ultimate In re Sernaker question for testing the obviousness rejection under 35 USC 103 before this Board of Appeals is whether applicant herein applied "knowledge clearly present in the prior art". If it is the case that none of the prior art disclosed what applicant had done in his invention, the rejection fails the Sernaker test.

It is submitted that no artisan knowledge, other than that provided by applicant herein, is of a method for bundling conductors by providing a cable encircling member which is flat throughout a full length thereof, assembling a cable tie with the cable encircling member and using the cable tie to form the flat cable encircling member from such flat condition into a spiral encircling the conductors.

As developed in the outset discussion of the Section 102 rejection, Farrell does not so teach. As the Examiner admits, Fennell does not so teach.

Fundamental to the Section 103 rejection at hand is an impermissible hindsight resort to applicant's instant disclosure, which is anathema to obviousness rejections under a legion of controlling case law, including the Sernaker court.

Turning to further practicalities, the Examiner would modify the Fennell device:

...to provide a simpler means of fastening the clamp to the conductors and reducing the manufacturing costs associated with the elimination of the hook and loop fastening element.

Manifestly, assembling a cable tie about Fennell's device would be fully of no use - Fennell's flexible strap member already has its own fastening elements - its hooks and loops. Per Fennell, the user of his device engages the hooks and loops after it is in encircling relation to conductors, at which point a cable tie wrapped around the flexible strap member could not serve to change the spiralling degree of the flexible strap member.

The Examiner needs to remove such fastening elements. But the same are fundamental to the Fennell approach, which requires device reusability and fastening elements which are on the flexible strap member (Fennell Patent, Col. 2, ls. 15-22).

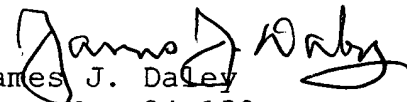
Case law is also legion to the effect that use of the teachings of a secondary reference (Farrell) in combination with the teachings of a primary reference (Fennell) to render the primary reference device ineffective to achieve its intended purpose is not proper under Section 103.

THE REJECTIONS OF CLAIM 1 AND 6 SHOULD BE REVERSED.

Reliance is placed on In re Fine, 5 USPQ 2d 1596, 1600 (Fed. Cir. 1988) and Ex parte Kochan, 131 USPQ 204 (Bd. App. 1960) for allowance of the dependent claims, since they differ in scope from parent independent claims submitted as patentable.

Patentability of all claims is believed to have been established and, as such, it is submitted that this application is now in condition for allowance. Indication to that effect is solicited.

Respectfully submitted,


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